REMARKS

Drawing Objections

The Examining Attorney has objected to the drawings under 37 CFR 1.83(a), stating that the drawings must show every feature of the invention specified in the claims. "Therefore, the loops and hook (of claims 3,4,27,28), spring "outside" (claims 6,30), "containers" (claim 51, line 2) the container must be shown or the feature(s) canceled from the claim(s). No new matter should be entered."

Applicant has amended **Figure 2A** and added new **Figures 2B** and **2C**, illustrating the loops and hooks claimed. Please see attached "Replacement Sheets and Annotated Sheets Showing Changes." The issues relating to the spring "outside" and container have been addressed in the Amendment to the Drawings Section above.

Claim Rejections – 35 U.S.C. §112

The Examining Attorney has stated "Claims 1-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." The Examining Attorney has raised the following questions which are shown below in *Italics*. Answers to these questions will follow each question.

How does actuation of the trigger 215 displace the first 35 and second 40 seals? The operative connections of components 214, 210, 55, 40 are not explained in a manner in either the written specification or drawings to permit for practice. How are these components operatively connected to carry out sampling?

"[A]s illustrated in **Figures 3, 5** and **7-12**, a fluid sampling device **190** with dual-opening sample containers **10** includes the following components. At least one sample container **10** is provided. The container **10** is formed of substantially rigid, fluid impermeable material and has a hollow cavity **20** in communication with first **25** and second **30** open ends. First **35** and second **40** end seals are provided. The end seals **35, 40** are sized and shaped to fit sealably the first **25** and second **30** open ends. A first elastic member **45** is provided. The first elastic member **45** urges the first **35** and second **40** end seals to removably close the first **25** and second **30** open ends. A support platform **195** is provided. The support platform **195** is removably attached to the sample container **10** and has a fixture **200** for removable connection to a raising and lowering device (not shown). The support platform **195** has first **205** and second **210** movable attachment members. The attachment members **205, 210** are sized, shaped and located to removably engage the first **35** and second **40** end seals.

A trigger **215** is provided. The trigger **215** is located to move the attachment members **205, 210** from a first position **220** (see **Figure 3**) to a second position **225** (see **Figure 5**). When the sample container **10** is attached to the support platform **195** and the first **35** and second **40** end seals are engaged (at activating protrusion **50, 55** by holes **75**) by the first **205** and second **210** attachment members in the first position **220**, the sample container **10** will be open. The support platform **195** may then be lowered into a fluid source (not shown) by the raising and lowering device and the trigger **215** pulled to move the first **205** and second **210** attachment members to the second position **225** releasing the first **35** and second **40** end seals. This permits the first elastic member **45** to urge the first **35** and second **40** end seals to seal the first **25** and second **30** open ends of the sample container **10**. This causes a fluid sample **235** to be sealed within the sample container **10**, as illustrated in **Figure 1**. The support platform **195** may then be withdrawn from the fluid source with the sealed sample container **10** and the fluid sample **235**." Page 22, lines 12-23 and page 23, lines 1-14 (parenthetical remarks and underline added for

clarity). This section of the disclosure explains with particularity how the trigger 215 displaces the first 35 and second 40 seals and how these components are operatively connected to carry out sampling.

As to claims 6,30, how can the spring be "outside", and still cause the sampler to open/close? How is the spring structurally connected to the seals?

As shown in **Figure 12** the elastic member **45** ("spring") is attached in tension between support platform **195** and the linkage connected to seals **35** and **40**. As the spring acts on the linkage it serves to urge seals **35** and **40** to close open ends **25** and **30** of body **15** of container **10**. The functioning of this embodiment is very similar to that shown for the internal elastic member **45** shown in **Figures 1** and **3**, the only real difference being that the elastic member **45** is located outside of the container **10**.

On p. 19, are "Figures 1 ,2,4,5 and 8" (line 10) a single embodiment? The written description in this manner suggests so, but the drawings certainly appear to be unrelated, let alone different.

While sample container 10 is shown in **Figure 5**, it is not readily visible. Line 10 of page 19 has been corrected to read "(1) **Figures 1, 2, 4, 6** and **8** illustrate a dual-opening sample container **10** that can be ..." Please see Amendments to the Specification on page 16, *supra*.

On p. 19, to what extent is Fig 3 a "variant" (line 17) of Figure 2? After all, note (sic) even the container 15 is visible in Figure 3.

Container **10**, having body **15**, is, in fact present in **Figure 3** as shown by the labeling of activating protrusions **50** and **55** and outer ends **60, 65** of the first **35** and second **40** end seals. As elements **50, 55, 60** and **65** are not earlier described, the container **10** shown in **Figure 3**, is a variant of the earlier described invention. For the sake of clarity, line 19 on page 19 has been amended to read "(2) In a variant of the invention, as

illustrated in **Figures 3** and **4**, first **50** and second **55** ..." **Figure 4** more clearly shows these additional elements. Please see Amendments to the Specification on page 17, *supra.*

On p. 19, what structurally creates "removable engage means 70" (line 20)? No structure is clearly depicted n Figure 3 in a manner that provides for a working apparatus. How are elements 50,55 structurally related to means 70 in any figure?

As shown in **Figure 3** means **70** are the ends of first **205** and second **210** movable attachment members which removably engage holes **75** in activating protrusions **50** and **55**. This relationship can also be seen in **Figures 7, 8** and **10** in which the seals **35** and **40** are held in the open position by the ends (means **70**) of attachment members **205** and **210**.

On p. 20, how are "Figures 1,2,4,5 and 8" (line 1) a "further" (line 1) variant, as compared to the same figures on p. 19?

In this variant the activating protrusion **50, 55** further includes holes **75**, loops (not shown) or hooks (not shown) for removable engagement of the means **70** for holding open the end seals **35, 40** (page 20, lines 1-3). While these are the same figures used to illustrate other variants, this portion of the disclosure does describe a new variant, identifying additional elements not earlier described. While the new elements appear in a drawing used to illustrate other variants, these elements were not earlier identified in the description of those variants.

On p. 20, how are these same figures once again a "further variant" (line 1)? How are they a variation of what was previously described in the written specification?

The figures are not the variant. The disclosure describes a number of variants, new and distinct features of which are, in some cases shown in the same figures. The disclosure, which mirrors the new elements added by successive dependent claims, describes each of these new elements as they are added. New figures are not needed for each element added, simply a more detailed description of the same figures.

On p. 20, how does (sic)holes 75 have any structural/functional relation to means 70?

This is not apparent in Figures 3,4.

Means **70** engage holes **75** to hold seals **35, 40** in the open position. See **Figures 3, 7, 8, 9** and **10** which illustrate this relationship.

On pages 20,21,22,23,24,25,26,27, does use of the phrases "further variant" really mean another embodiment? After all, variations must be variations of a basic concept, and cannot be simply additions to an otherwise incomplete concept. How is the quoted phrase supposed to interpreted in this application?

All of the described variants are complete additional embodiments of the invention, each successive variant adding additional features not found in the prior complete and functional variant. No incomplete or non-functional embodiments are described. Applicant is entitled to describe a functional feature in "means plus function" language as a first broadly described embodiment and then later describe more specific functional apparatus providing the same functionality, not using such "means plus function" language.

On p. 22, "attached" (line 20) how? What are the "members" (last line) "movable" (last line) with respect to? Do they move due to the "raising and lowering" (line 2 from last), or do they somehow move with respect to platform 195?

The support platform **195** is removably attached to the sample container **10** in various ways. In **Figures 3** and **5** the container **10** fits inside of cylindrical support platform **195** and is introduced through a removable end cap to which fixture **200** is attached. In **Figure 8**, it can be clearly seen that a hinged band with turnbuckle latch is holding the container **10** to the support platform **195** in removable fashion.

"The support platform **195** has first **205** and second **210** movable attachment members. The attachment members **205, 210** are sized, shaped and located to removably engage the first **35** and second **40** end seals." (Page 22, lines 21 and 22 and page 23, lines 1 and 2). The attachment members move with respect to the support platform **195**. It is the entire sampling

device **190** with enclosed container **10** that is raised and lowered in the fluid to be sampled.

On p. 23, "engaged" (line 5) how? How does engagement allow for an "open" (line 7) condition?

"When the sample container **10** is attached to the support platform **195** and the first **35** and second **40** end seals are engaged by the first **205** and second **210** attachment members in the first position **220**, the sample container **10** will be open." (Page 23, lines 4-6) The seals, which include means **70** (which in later embodiments include activating protrusions **50, 55** and holes **75**) are engaged by first **205** and second **210** attachment members (which penetrate the holes **75**) to hold the seals in an open **220** position. In practice, one inserts the container **10** in or on the support platform **195**, opens the seals **35, 40** and moves the first **205** and second **210** attachment members into the first position **220**, engaging the seals **35, 40** (by means **70**) to hold them in an open position.

On p. 24, "engage" (line 1) how? Figures 4 and 5 suggest that both members 205, 210 and protrusions 50, 55 are non-contacting members.

The ends of first **205** and second **210** attachment members enter the holes **75** in activating protrusions **50, 55** when maintaining the seals **35, 40** in an open **220** position. "**Figure 4** is a perspective view of the **Figure 1** embodiment, illustrating the end seals in an open position;" (Page 18, lines 12-13) "**Figure 5** is a side elevational view of the **Figure 3** embodiment, illustrating attachment members having released the end seals to a second, closed position;" (Page 18, lines 14-15) **Figure 4** illustrates the container **10** with the seals in the open position, as they will be held by the support platform **195**. There is no contact between the first **205** and second **210** attachment members and the seals once they have been released by pulling trigger **215**. There is no need for contact once the seals are in the closed **225** position.

On p. 25, how does container 10 "enclose" (line 13) the platform 195? After all, the container does not contain that element 195. Isn't the lead line for 195 (in Figure 9) incorrect? Where is element 195 in Figure 9?

"(38) In another variant, as illustrated in **Figures 9-11**, the sampling container **10** is sized and shaped to substantially enclose the support platform **195** within outer horizontal dimensions **295** of the sample container **10**." (Page 25, lines 12-14) As stated above, the container **10** encloses the support platform **195** to the extent that the support platform **195 fits** within outer horizontal dimensions **295** of the sample container **10**. The idea here is that the sampling device **190** which includes the support platform **195** and the container **10** can be used in a pipe or conduit no larger than the outer horizontal diameter or dimensions of the container **10**. The lead line for element **195** is incorrect, it should extend to the platform and not stop at the container body **20**. Please see Amendments to the Drawings on page 18, *supra*.

On p. 27, is there really a "variant" (line 3) that has at least two ("dual" on line 4) containers 10? If so, where is this in any figure? How are the plurality of containers connected together in a single working system/apparatus?

The "dual" on line 4 relates to the dual-opening sample container **10**, i.e., a sample container **10** having an opening on each end to permit easy flow through of the fluid being sampled. These containers are best shown in **Figures 1, 2, 2A, 4, 6, 7-12**. The plurality of containers **10** are used with a single support platform **195** successively. That is, a single container **10** is attached to the support platform **195**, lowered into the fluid to be sampled, triggered, sealing the ends of the container **10**, raised from the fluid and the container is then removed from the support platform **195**. A second container **10** is then attached to the support platform **195** for further sampling.

As to claim 51, where in the written specification/drawings is there an enabling description of a single "sampling device" (line 1) that employs a plurality of "containers" line

2)?

"(51) In another variant of the invention, a method of sampling fluid using a fluid sampling device **190** with dual-opening sample containers **10**, includes the steps of providing at least one sample container **10**. The container **10** is formed of substantially rigid, fluid impermeable material and has a hollow cavity **20** in communication with first **25** and second **30** open ends of the sample container **10**. Providing first **35** and second **40** end seals for the container **10**. The end seals **35, 40** are sized and shaped to fit sealably to the first **25** and second **30** open ends. Providing a first elastic member **45**. The first elastic member **45** urges the first **35** and second **40** end seals to removably close the first **25** and second **30** open ends.

Providing a support platform **195**. The support platform **195** is removably attached to the sample container **10** and has a fixture **200** for removable connection to a raising and lowering device. The support platform **195** has first **205** and second **210** movable attachment members. The attachment members **205, 210** are sized, shaped and located to removably engage the first **35** and second **40** end seals. Providing a trigger **215**. The trigger **215** is located to move the attachment members **205, 210** from a first position **220** to a second position **225**. Attaching the support platform **195** to the sample container **10** with the movable attachment members **205, 210** in said first position **220**, engaging the first **35** and second **40** end seals so as to maintain the end seals **35, 40** in an open position **240**. Attaching the support platform **195** to the raising and lowering device **175**. Lowering the support platform **195** into a fluid source. Pulling the trigger **215** to move the attachment members **205, 210** from the first position **220** to the second position **225**, thereby sealing the first **25** and second **30** open ends with a fluid sample **235** inside of the hollow cavity **20**. Raising the support platform **195** from the fluid source. Removing the sealed sample container **10** from the support platform **195**.

When the sample container **10** is removed from the support platform **195**, it may be sent for testing and examination without contamination from elements (not shown) outside the fluid

source." (Page 27, lines 3-24 and page 28, lines 1-5, emphasis added) Please see explanation above relating to page 27.

Claims 36, 37, 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 36, is the "an open end" (line 3) one of the previously claimed opened ends (Double Inclusion), or is it a 3rd open end?

"(35) In still a further variant, as illustrated in **Figures 3** and **5**, the support platform **195** has a hollow body **280**. The hollow body **280** is sized and shaped to enclose the sample container **10**.

(36) In yet a further variant, the support platform **195** further comprises at least one fluid-permeable protective end cover **285**. The end cover **285** partially encloses an open end **290** of the hollow body **280**." (Page 25, lines 4-9) As shown here, and in **Figures 3** and **5**, open end **290**, is an open end of hollow body **280** of support platform **195**. It is a third open end. This support in the disclosure provides the particularity required by 35 U.S.C. §112, second paragraph. As Claim 37 depends from Claim 36, which should now be allowable, Claim 37 should likewise now be allowable.

As to claim 38, what does this refer to in the written specification and/or drawings? Where in the specification/drawings is the platform enclosed inside the container?"

"(38) In another variant, as illustrated in **Figures 9-11**, the sampling container **10** is sized and shaped to substantially enclose the support platform **195** within outer horizontal dimensions **295** of the sample container **10**." (Page, lines 12-14, emphasis added) Please see explanation relating to page 25, above. This support in the disclosure provides the particularity required by 35 U.S.C. §112, second paragraph.

Claim Rejections – 35 U.S.C. §102(b)

The Examining Attorney has stated *"Claims 1, 5, 6, 14, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Dickinson et al.*

Dickinson et al teach (Figure 1) a dual-opening sample container, including: body 2 with open ends; first and second sealing stoppers 13, 14; first elastic member 15 that urges the seals to removably close the ends. The elastic member is both inside and outside the container. Compression of the stoppers into the container necessarily result in an increase of fluid pressure."

Claim 1 has been amended to add the following two elements, thereby distinguishing this claim over *Dickinson et al.*:

> first and second activating protrusions, each of said activating protrusions extending outwardly from outer ends of said first and second end seals and being sized, shaped, and disposed to removably engage means for holding open said end seals; and
>
> first and second removable securing caps, said securing caps permitting passage of said activating protrusions through said securing caps and being sized and shaped to retain said first and second end seals in sealable connection with said first and second open ends of said sample container.

Claims 2 and 7 have been cancelled and their elements, shown above, incorporated into Claim 1. *Dickinson et al.* does not disclose first and second activating protrusions and further, does not disclose first and second removable securing caps permitting passage of the activating protrusions through the securing caps. As such, *Dickinson et al.* cannot anticipate amended Claim 1 and thus Claim 1 should now be allowable.

Claims 5, 6, 14 and 15 depend from Claim 1 and as Claim 1 should now be allowable,

these dependent claims should likewise be allowable.

The Examining Attorney has stated "*Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. as applied to claim1 above, and further in view of Banu.*

As to claims 2,3,4, it would have been obvious to employ Banu's extended ends 14, 15 with circular rings (visible in Fig. 8) to secure Dickinson's stoppers and lines 17 because Banu teaches that a ring may be inserted into a plug to secure a trigger line. It would have been obvious to employ removable rings (like a key chain) because ring must be removable in nature to permit for insertion of an item on that ring."

Claim 2 has been cancelled and its limitations, along with those of Claim 7 have been incorporated into Claim 1. The removable securing caps of former Claim 7 as now described are not disclosed in *Banu* or *Dickinson et al.* As the proposed combination would not include all of the elements of the present invention and as Claims 3 and 4 now both depend from Claim 1, Claims 3 and 4 cannot be obvious in view of the combination of *Dickinson et al.* in view of *Banu* and should therefore now be allowable.

The Examining Attorney has stated "*Claims 7,17,8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. as applied to claim 1 above, and further in view of either Rosenblum or Numata et al.*

As to claims 7,17,8,9, it would have been obvious to employ a cap 14 with a seal 30 as used in Rosenblum to seal Dickinson's container 2 because Rosenblum teaches that a longitudinally positioned cap and seal will effectively seal a sample container when desired. In the alternative, it would have been obvious to employ Numata's Teflon coated rubber stopper to seal Dickinson's container because Numata teaches (col. 19, lines 25-30) that a coated stopper will effectively seal a container. In addition, it would have been obvious to apply a cap to the

same stopper because Numata teaches use of an aluminum cap to aid in sealing the stopper to that same container. Caps routinely employ many of a variety of connection type elements, including threads and bayonet mounts."

Claim 7 has been cancelled and its limitations along with further language describing the construction of the securing caps to accommodate the activating protrusions have been incorporated in Claim 1. *Rosenblum* does not disclose a removable securing cap permitting the passage of an activating protrusion through the securing cap. Claims 8 and 9, describing alternative means of securing these specially adapted securing caps to the containers have been amended to depend from Claim 1. Therefore, Claims 8 and 9 should now be allowable.

Numata does not disclose the "substantially flat surface to mate with a flat inner side of either of said first and second securing caps" of Claim 17. Further, Claim 17 now depends from Claim 1 and thus should be allowable.

The Examining Attorney has stated "*Claims 11-13,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. as applied to claim 1 above, and further in view of Numata et al.*

As to claims 11-13, it would have been obvious to employ Numata's Teflon coated rubber stopper to seal Dickinson's container because Numata teaches (col. 19, lines 25-30) that a coated stopper will effectively seal a container.

As to claim 18, it would have been obvious to employ Numata's Teflon coated rubber material for Dickinson's stopper because Numata teaches (col. 19, lines 25-30) that a coated material will effectively seal a container. In addition, note that Dickinson's stoppers 13,14 have a flat upper surface that is indented into the stopper, suggestive that the stopper has a "membrane" in the stopper that can permit introduction of a needle."

As to Claims 11-13, Claim 1 has been amended to include seals with attached activating protrusions and securing caps constructed with openings. The seals of *Dickinson* and *Numata*

do not include the activating protrusions of the present invention and neither reference includes the securing caps having openings for these protrusions. Further, Claims 11-13 depend from amended Claim 1 and thus should now be allowable.

As to Claim 18, simply because the stopper of the *Dickinson* reference has a flat spot, does not indicate that the stopper includes a membrane that would permit the introduction of a needle. Many stoppers have a flat upper surface that it would be virtually impossible to pass a needle through. *Dickinson* neither teaches nor suggests this capability. Further, Claim 18 also depends from amended Claim 1 and thus should now be allowable.

The Examining Attorney has stated "*Claims 16 (sic) are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. as applied to claim1 above, and further in view of Niskin '012.*

As to claim 16, it would have been obvious to employ a conically shaped seal because Niskin teaches (Figure 3) that conical seals provide for satisfactory plugging of a sampler."

Claim 16 depends from amended Claim 1 in which the seals include activating protrusions attached to their outer ends. Such protrusions are not shown or suggested in *Dickinson* or *Niskin*. As such, Claim 16 should be allowable.

The Examining Attorney has stated "*Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al.*

As to claim 19, the material of construction of the container need only be such that it does not react with the material being sampled, suggestive of use of common plastic or metal."

Claim 19 depends from amended Claim 1 which includes a container having seals with activating protrusions and securing caps with opening to accommodate these protrusions. These features are not found in *Dickinson* and therefore, Claim 19 should be allowable.

The Examining Attorney has stated "*Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al as applied to claim1 above, and further in view of Rosenblum.*

As to claims 20-22, Rosenblum teaches (col. 4,lines 45-53) the desirability of removing samples from a few milliliters to several liters, suggestive of the claimed container dimensions/volumes."

Claims 20-22 depends from amended Claim 1 which includes a container having seals with activating protrusions and securing caps with opening to accommodate these protrusions. These features are not found in *Dickinson* or *Rosenblum* and while *Rosenblum* discloses the desirability of removing samples from a few milliliters to several liters, it does not disclose using the apparatus described in Claim 1 from which Claims 20-22 depend. Therefore, Claims 20-22 should be allowable.

The Examining Attorney has stated "*Claims 23,25-30,35,36,38,42,43,47,51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al., in view of Banu.*

Dickinson's apparatus includes a removable clamp bands 5,6 that serve as a platform, the platform including structure 44 that is connected to a raising/lowering device 35. The platform includes attachment members 17 that engage the seals.

Dickinson employs a trigger 41,42, which when pulled ("upward tug" on col. 4, line 41) results in the attachment members moving from a first position to a second position releasing the end seals.

Dickinson's members 17 are not clearly removable with respect to the seals.

As to claims 23,26,27,28,35,42,43,51, it would have been obvious to employ Banu's extended ends 14,15 with circular rings (visible in Fig. 8) to secure Dickinson's stoppers and lines 17 because Banu teaches that a ring may be inserted into a plug to secure a

trigger line. It would have been obvious to employ removable rings (like a key chain) because ring must be removable in nature to permit for insertion of an item on that ring."

Claim 23 includes the following limitation: "a support platform, said support platform being removably attached to said sample container..." One of the key features of the instant invention is that multiple sample containers can be successively used with a single support platform. This is possible because the support platform is removably attached to the sample container. In the preferred embodiment, the sample container is fitted inside of a cylindrical support platform from which the end cover **285** is readily removable for insertion or removal of the sample container. In contrast, the tube 2 of the *Dickinson* disclosure is not shown or described as being removably attached by bands 5 and 6 to base 8. Further, seals 13 and 14 are attached to base 8 by cables 17 through anchor fittings 18. Even if cables 17 are disconnected from anchor fittings 18 and bands 5 and 6 were somehow loosened, base 8 could still not be removed from tube 2 without removing seals 13 and 14 unless bands 5 and 6 are first removed completely as the seal ends are wider than the diameter of tube 2 (see Figure 3). As the Examining Attorney has stated "*Dickinson's members 17 are not clearly removable with respect to the seals.*" Therefore, as neither *Dickinson* nor *Banu* discloses a support platform being removably attached to the sample container, and as neither reference suggests such removal, the instant invention cannot be found obvious over any combination of these references and thus Claim 23 should be allowable. As claims 26, 27, 28, 35, 42 and 43 depend from Claim 23, they should likewise be allowable. Claim 51 is a method claim embodying the apparatus described in Claim 23 and further describing the removable attachment of the support platform to the sampling container. As such, Claim 51 should also be allowable.

"*Dickinson employs a trigger 41,42, which when pulled ("upward tug" on col. 4, line 41) results in the attachment members moving from a first position to a second position releasing the end seals.*" The triggering mechanism is vastly different than that employed in

the instant invention. In *Dickinson*, the means for raising and lowering the sampling device also provides the triggering impulse (tugging on the cable). The instant invention includes a separate raising cable and a cable sheath with a trigger cable for activating the supporting platform to release the seals on the sample container. Thus this triggering mechanism can be distinguished from that shown in *Dickinson*.

"*...it would have been obvious to employ Banu's extended ends 14,15 with circular rings (visible in Fig. 8) to secure Dickinson's stoppers and lines 17 because Banu teaches that a ring may be inserted into a plug to secure a trigger line. It would have been obvious to employ removable rings (like a key chain) because ring must be removable in nature to permit for insertion of an item on that ring.*"

While the rings of *Banu* are removably attached to extended ends 14 and 15 to secure a trigger line, the rings are not removable from the extended ends unless the sampling device is removed from the fluid source. In contrast, the movable attachment members of instant invention can be moved by the trigger to disengage from the activating protrusions of the seals while the support platform and sample container are submerged. In this way, the seal releasing mechanism of the instant invention can be distinguished from the removable rings of *Banu*. On this basis, as well as the arguments above relating to removable attachment of the support platform to the sample container, Claim 23 and thus those claims that depend upon Claim 23 should be allowable.

The Examining Attorney has stated "*As to claim 25, note elastic member 31 in Figure 7 of Dickinson, the member holding the attachment members in the first position.*"

Claim 25 depends from Claim 23 and thus should be allowable.

The Examining Attorney has stated "*As to claims 29 and 30, the elastic member is both inside and outside the container.*"

While element 15 is an elastic member, element 17 is a cable. If cable 17 were

elastic, it would not be able to hold the seals 13 and 14 in an open position. Further, Claims 29 and 30 depend from Claim 23 and thus should be allowable.

The Examining Attorney has stated "*As to claim 36, note that Dickinson has a valve 20 that inherently covers an opening that passes into the cavity of the body 2.*"

The valve 20 of *Dickinson* must be kept closed while the sampler is submerged to prevent fluid from leaking from the sampling container one the seals are closed on the container. In contrast, the protective end cover of the instant invention is always open, to permit fluid to pass freely into the sampling container, to later be sealed therein by the closing seals. Thus while *Dickinson* discloses a valve that covers an opening into the cavity of the body, the protective end cover of the instant invention never covers the opening to the sampling container. As such, Claim 36, which also depends indirectly from Claim 23, should be allowable.

The Examining Attorney has stated "*As to claim 38, the platform portion behind the container 2 cannot be seen in Figure 1, suggestive that the container encloses the platform 'within the outer horizontal dimensions' as claimed.*"

Comparing Figure 1 of *Dickinson* with **Figure 9** of the instant invention, it is clear that the support platform **190** falls within the outer horizontal dimensions of the sample container (less than its diameter, in this case) and that base 8 and handle 7 are not within the outer horizontal dimensions of tube 2. As this limitation is missing from the disclosure of *Dickinson*, Claim 38, which also depends from Claim 23, should also be allowable.

The Examining Attorney has stated "*As to claim 47, the material of construction of the container need only be such that it does not react with the material being sampled, suggestive of use of common plastic or metal.*"

Claim 47 depends from Claim 23 and thus should likewise be allowable.

The Examining Attorney has stated "*As to claim 51, it would have been obvious to*

employ the same trigger system with different containers to both take/store a plurality of samples from a single sampling excursion to minimize the travel time in sample taking."

None of the cited references allow for removing the sampling container from the support platform so that a plurality of sampling containers may be employed with a single platform. The instant invention provides this capability as the support platform is removably attached to the sample container. For this reason, Claim 51 should be allowable over the cited references.

The Examining Attorney has stated "*Claims 31-33,45,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al in view of Banu as applied to claims 23 and 51 above, and further in view of either Rosenblum or Numata et al.*

As to claims 31-33,45, it would have been obvious to employ a cap 14 with a seal 30 as used in Rosenblum to seal Dickinson's container 2 because Rosenblum teaches that a longitudinally positioned cap and seal will effectively seal a sample container when desired. In the alternative, it would have been obvious to employ Numata's Teflon coated rubber stopper to seal Dickinson's container because Numata teaches (col. 19, lines 25-30) that a coated stopper will effectively seal a container. In addition, it would have been obvious to apply a cap to the same stopper because Numata teaches use of an aluminum cap to aid in sealing the stopper to that same container. Caps routinely employ many of a variety of connection type elements, including threads and bayonet mounts."

Claims 31-33 and 45 depend directly from Claim 23. As Claim 23 should be allowable as discussed above, claims 31-33 and 45 should likewise be allowable.

The Examining Attorney has stated "*Claims 39-41,46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Banu as applied to claim 23 above, and further in view of Numata et al.*

As to claims 39-41, it would have been obvious to employ Numata's Teflon coated

rubber stopper to seal Dickinson's container because Numata teaches (col. 19, lines 25-30) that a coated stopper will effectively seal a container.

As to claim 46, it would have been obvious to employ Numata's Teflon coated rubber material for Dickinson's stopper because Numata teaches (col. 19, lines 25-30) that a coated material will effectively seal a container. In addition, note that Dickinson's stoppers 13,14 have a flat upper surface that is indented into the stopper, suggestive that the stopper has a "membrane" in the stopper that can permit introduction of a needle."

Claims 39-41 and 46 depend from Claim 23 and thus should be allowable.

The Examining Attorney has stated "*Claims (sic) 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al in view of Banu as applied to claim 23 above, and further in view of Niskin '012.*

As to claim 44, it would have been obvious to employ a conically shaped seal' because Niskin teaches (Figure 3) that conical seals provide for satisfactory plugging of a sampler."

Claim 44 depends from Claim 23 and thus should be allowable as Claim 23 should be allowable.

The Examining Attorney has stated "*Claims 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al in view of Banu as applied to claim 23 above, and further in view of Rosenblum.*

As to claims 48-50, Rosenblum teaches (col. 4,lines 45-53) the desirability of removing samples from a few milliliters to several liters, suggestive of the claimed container dimensions/volumes."

Claim 48-50 depends from Claim 23 and thus should be allowable as Claim 23 should be allowable.

The Examining Attorney has stated "*Claims 1,5,6,14,15, is rejected under 35 U.S.C.*

102(b) as being anticipated by either Phillips or Richard. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phillips and Richard employ pull triggers."

Claim 1 has been amended to add the following two elements, thereby distinguishing this claim over *Phillips* and *Richard*, neither of which include these limitations:

> first and second activating protrusions, each of said activating protrusions extending outwardly from outer ends of said first and second end seals and being sized, shaped, and disposed to removably engage means for holding open said end seals; and
>
> first and second removable securing caps, said securing caps permitting passage of said activating protrusions through said securing caps and being sized and shaped to retain said first and second end seals in sealable connection with said first and second open ends of said sample container.

Claims 2 and 7 have been cancelled and their elements, shown above, incorporated into Claim 1. *Phillips* and *Richard* do not disclose first and second activating protrusions and further, do not disclose first and second removable securing caps permitting passage of the activating protrusions through the securing caps. As such, *Phillips* and *Richard* cannot anticipate Claim 1. While these references include pull triggers, they lacks the other elements described above that comprise the invention.

Claims 5, 6, 14 and 15 depend from Claim 1 and as Claim 1 should now be allowable, these dependent claims should likewise be allowable.

The Examining Attorney has stated "*Chapelle teach a spring 18 that is positioned entirely outside of a sample chamber.*

Blackburn et ai's seals 26,56 are strictly conical.

Sher et al. use a septum 44."

Applicant has examined these references and found that, while they each have a feature similar to one found in the instant invention, they also lack many of the other features found therein. As such, they cannot be said to anticipate any of the claims, as now amended of the present application. Further, none of these references contain and teaching or suggestion to combine these features with those of other references or that which is known in the relevant art so as to render the present invention obvious.

New Claims 55-82 have been added to more particularly point out and distinctly claim that subject matter that the Applicant regards as the invention. No new matter has been added.

As all of the informalities identified by the Examining Attorney have been addressed in the new and replacement drawings and Drawing Descriptions, and based upon the above arguments, Applicant urges that the application is now in condition for allowance. Enclosed please find a credit card authorization in the amount of $930 including $55 as fee for Extension for response within first month under 37 CFR §1.17(a)(1) and $875 as additional fee required for new Claims 55-82.

Respectfully submitted,

Belasco Jacobs & Townsley, LLP

Dated: January 19, 2006

By: _____

David A. Belasco
Registration No. 41,609
Attorney for Applicant

Amendments to the Drawings

The attached Replacement Sheet of drawings includes changes to **Figure 2A**. The new drawing sheet includes **Figures 2B** and **2C**. The Replacement Sheet, which includes **Figures 1, 2, and 2A,** replaces the original sheet which included **Figures 1, 2, and 2A**. In **Figure 2A,** previously omitted element **75** has been added. Element **75** was previously shown in **Figures 1, 2, 4** and **11**. In new **Figures 2B** and **2C**, previously described but unlabeled elements **77** and **79** have been added. Support for these changes is found in Claims 3, 4, 27 and 28 and on page 20, lines 2 and 5 and on page 24, lines 4 and 6 (see Amendments to the Specification above). No new matter has been added.

With respect to Claims 6 and 30, elastic member **45** (spring "outside") is clearly shown in **Figure 12**. Support referencing elastic member **45** is found at page 20, lines 8 and 9 and at page 24, lines 10 and 11. With respect to Claim 51, line 2, the container **10** is clearly shown in **Figures 1, 2, 2A, 4, 6, 8,** and **9-12**. Claim 51 has been amended, changing "containers" to "container" to more clearly point out and distinctly claim the subject matter of the invention. Support for this element is found on page 27, lines 4-5.

Attachments: Replacement Sheet Showing **Figures 1, 2, and 2A**

Annotated Sheet Showing Changes to **Figure 2A**

New Drawing Sheet Showing **Figures 2B and 2C**

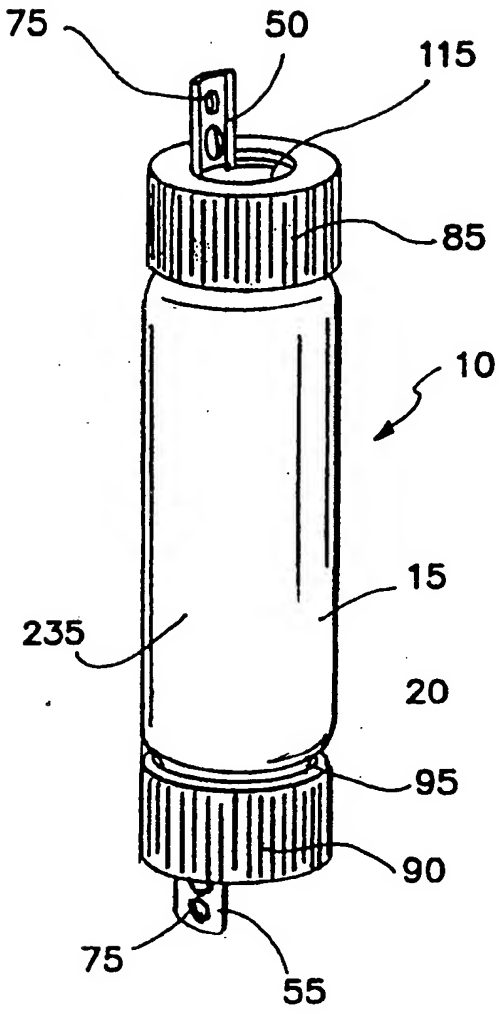

FIG. 1

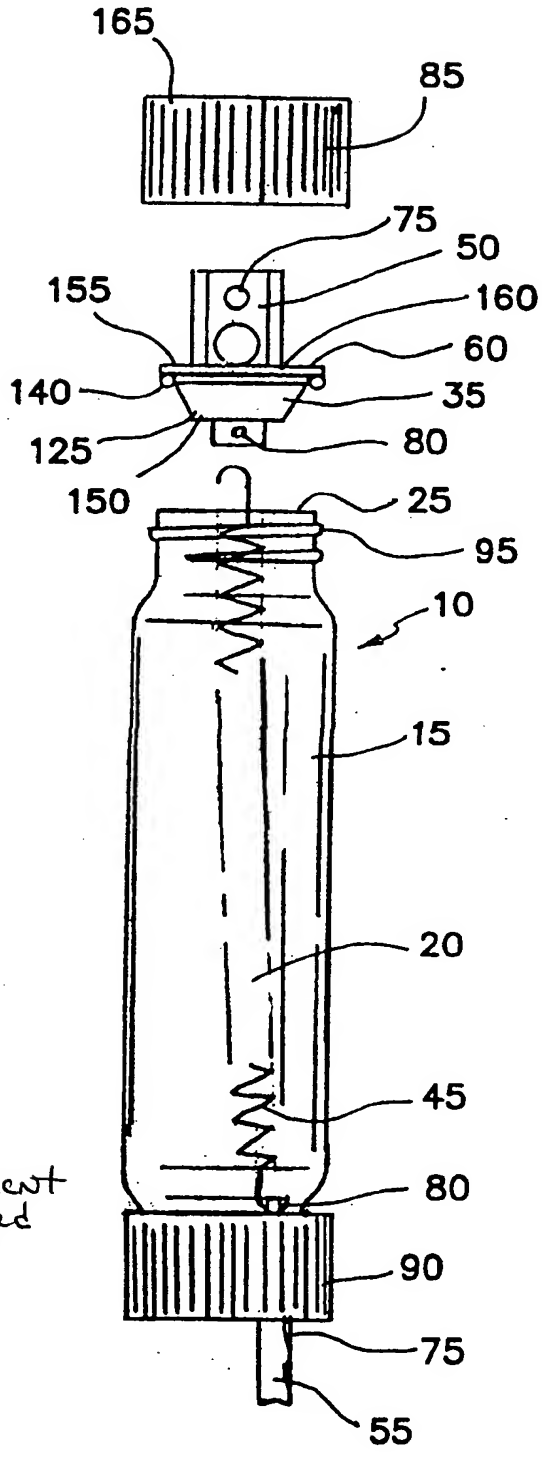

FIG. 2

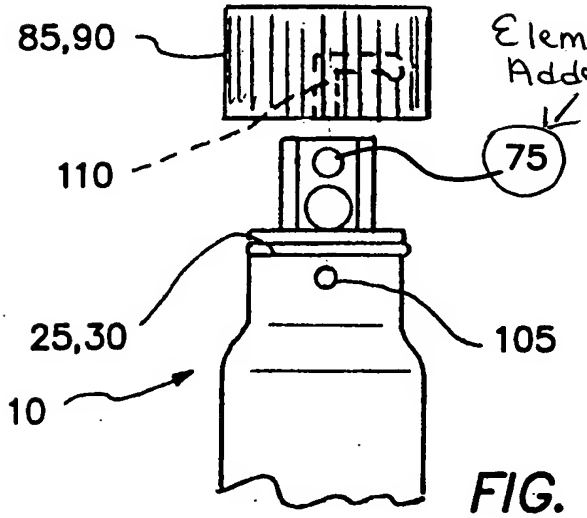

FIG. 2A